



U.S. Department
of Transportation

400 Seventh Street, S.W.
Washington, D.C. 20590

Pipeline and
Hazardous Materials Safety
Administration

GUIDANCE AND CRITERIA FOR FIREWORKS NOVELTIES

- A. **REGULATORY AUTHORITY:** 49 CFR § 173.56(i) - The Associate Administrator may specify a classification or except the material or device from the requirements of this subchapter.
- B. **SYNOPSIS:** In order to resolve issues regarding fireworks novelties, the U.S. Department of Transportation is providing the following guidance and criteria for novelties that are not regulated as explosives.
- C. **NOVELTIES:** The following novelties may be transported as not regulated as explosives by surface modes when transported under the following provisions. When novelties are transported by aircraft, they must be classed as Flammable solid, inorganic, n.o.s. (novelties), UN3178. Novelties must be manufactured and packaged in accordance with the following:
1. **Snappers** - Snappers are small, paper-wrapped items containing not more than 1.0 milligrams of silver fulminate coated on small bits of sand or gravel. Snaps must be packaged in an inner packaging which contains no more than 50 snaps with sawdust or other impact-absorbing materials.
 2. **Party Poppers** - Party poppers are small devices with paper or plastic exteriors that are actuated by means of friction (pulling a string or trigger). Upon activation, the device expels non-flammable paper streamers, confetti, and/or other non-flammable devices and produces a small report. Devices may not contain more than 16 milligrams (0.25 grains) of explosive composition. The chemical composition is limited to potassium chlorate and red phosphorus. Party poppers must be packaged in an inner packaging which contains no more than 72 devices.
 3. **Toy Smoke Devices** - Smoke devices are small devices made of cork or cardboard containing not more than 5 grams of pyrotechnic composition that produces a small cloud of smoke after activation. Smoke devices are typically activated by means of a safety fuse. Smoke devices must be constructed so that they will neither burst nor produce excessive flame (excluding fuse and small but brief bursts of flame accompanying normal smoke production). Smoke devices may not contain plastic in direct contact with the pyrotechnic composition, and smoke devices may not resemble, in color or configuration, banned fireworks

devices, such as M-80 Salutes, Cherry Bombs, or Silver Salutes. The chemical composition consists of potassium nitrate and sulfur for white smoke and combinations of potassium chlorate, sulfur, sugar, and organic dyes for colored smoke. All mixtures containing potassium chlorates must also contain an equal amount of a bicarbonate, such as sodium bicarbonate. Smoke devices must be packaged in an inner packaging which contains no more than 72 devices.

4. **Snakes and Glow Worms** - Snakes and glow worms are pressed pellets of pyrotechnic composition that contain not more than 2 grams of composition per article. Upon burning, snakes and glow worms produce a snake-like ash that expands in length as the pellet is consumed. The chemical composition consists of ammonium perchlorate, nitrated pitch, asphaltum, and carbonaceous materials, snakes may not contain arsenic. Snakes and glow worms must be packaged in an inner packaging which contains no more than 25 devices.

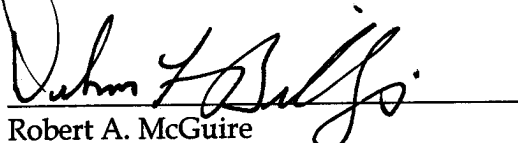
5. **Sparklers** -- Sparklers are devices that consist of a wire or wood dowel coated with pyrotechnic composition that produces a shower of sparks upon ignition. Sparklers that do not contain potassium chlorate or potassium perchlorate may not contain more than 100 grams of chemical composition per device. Sparklers that contain potassium chlorate or potassium perchlorate may not contain more than 5 grams of chemical composition per device. The chemical composition may consist of a combination of barium nitrate, potassium chlorate, potassium perchlorate, aluminum, magalium, iron filings, and dextrin. No pure magnesium is permitted. Sparklers must be packaged in an inner packaging which contains no more than 8 devices.

D. **Testing:** All novelty devices must successfully pass a thermal stability test. Each finished product in its inner packaging must be shown to be thermally stable at 75°C for at least 48 hours (no activation, smoke or disassembly).

E. **Packaging:** All novelty devices in their inner packagings must be packaged in strong outer packagings. The packages must conform to the requirements of § 173.24. The maximum gross weight of any strong outer package may not exceed 30 Kg.

F. **Marking Requirements:** Each package, and overpack if used, containing Novelties that conform to the criteria in this Letter must be plainly marked "NOVELTIES NOT REGULATED, EXCEPT WHEN TRANSPORTED BY AIR."

G. **Modes of Transportation Authorized:** Motor vehicle, rail freight, cargo vessel, passenger aircraft* and cargo aircraft* (*May only be shipped as Division 4.1).



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Date